

In re Application of: LEWIN A.S. et al.  
Confirmation No: 6548  
Application No.: 10/808,042  
Examiner: WHITEMAN, B.

### REMARKS

Claims 1-23 are pending in the application. Claims 4-6, 10 12,13 and 16-22 have been withdrawn as being directed to non-elected subject matter. The elected claims are merely to comply with the Restriction Requirement and is not to be construed as surrender of any subject matter in the instant application. Applicants hereby reserve the right to pursue the subject matter of the canceled claims in one or more divisional patent applications.

#### *Claim Rejections Under 35 U.S.C. § 102*

Claims 1-3, 7-9, 14-15 are rejected under 35 U.S.C. § 102(b) as being anticipated by Lewin et al. (W0200066780).

Applicants respectfully traverse.

The Examiner asserts:

Lewin teaches a ribozyme that has a portion of SEQ ID NO: 3 (Figures 17, 27, 34). Lewin teaches using a hammerhead ribozyme (page 3). Lewin teaches a vector or cells comprising the ribozyme (pages 9-10).

Applicants have reviewed the information in the cited reference. Applicants submit that the active ribozyme of wherein the cleavage takes place is different to the cited reference and the targets are completely different. Cleavage takes place at position 154 of the HSV UL20 n the instant invention. For example, Applicants teach on page 2, lines 16-20:

Accordingly, the invention features a ribozyme that specifically cleaves a target RNA sequence encoded by a HSV gene essential or important for efficient HSV replication or packaging. The gene can be, e.g., UL20, UL30, UL54, or ICP4. The ribozyme can be in a hammerhead configuration, within a vector, and/or within a cell. Examples of such ribozymes include those including SEQ ID NOs: 1, 3, 5, and/or 6.

On page 3, lines 19-25:

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The invention provides ribozymes that specifically cleave a target RNA sequence encoded by an HSV gene essential for replication. The RNA targeted can be any that is essential or important for HSV replication, e.g., one that encodes a protein necessary for efficient genome replication or viral assembly. Exemplary targets include RNAs encoding UL20, UL30, UL54 and ICP4. To inhibit replication of HSV in a cell, ribozymes against 1, 2, 3, 4 or more such targets can be used. It is preferred that at least 2 or 3 different ribozymes be used simultaneously to prevent mutation rendering ribozyme resistance.

Applicants submit that the ribozymes are different in that they each are specific for different targets and cleave at different locations. None of these sequences can be anticipated by the cited reference as each sequence is highly specific for a target. As such, the cited reference fails to teach each and every claim limitation.

In view thereof, Applicants respectfully request reconsideration and withdrawal of the instant rejection.

Claims 1-3, 7-9, 14-15 were rejected under 35 U.S.C. 102(e) as being anticipated by Lewin et al. (US 20050096282).

Applicants respectfully traverse.

As discussed above, ribozymes are target specific. The cited reference discusses ribozymes and targets which are completely different to the instant invention, i.e. the ribozyme from the cited reference could not function as in the instantly claimed invention and vice versa. As such, the cited reference does not teach each and every claim limitation and fails as a reference.

In view thereof, Applicants respectfully request reconsideration and withdrawal of the instant rejection.

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Claim 23 is rejected under 35 U.S.C. § 102(b) as being anticipated by Horsburgh et al. (US 6,277,621).

Applicants respectfully traverse.

Applicants teach a ribozyme-resistant cell for producing a HSV expression vector encoding an anti-HSV ribozyme, the cell comprising at least one nucleotide sequence encoding a portion of an HSV gene, the nucleotide sequence having been modified to not be cleavable by the ribozyme. Horsburgh et al. are directed to virus production. As such, Horsburgh et al. fail to teach each and every claim limitation and fails as a reference.

In view thereof, Applicants respectfully request reconsideration and withdrawal of the instant rejection.

### CONCLUSION

Applicants respectfully request entry of the foregoing remarks and reconsideration and withdrawal of all rejections. It is respectfully submitted that this application with claims 1-3, 7-9, 14-15 and 23 define patentable subject matter and is in condition for allowance. Accordingly, Applicant respectfully requests allowance of these claims.

Applicants have made every effort to present claims which distinguish over the cited art, and it is believed that all claims are now in condition for allowance. However, Applicants request that the Examiner call the undersigned (direct line 561-671-3666) if anything further is required by the Examiner prior to issuance of a Notice of Allowance for all claims.

This response is being filed within the shortened statutory period and as such no extension of time or fees are due. Although, Applicants believe that no extensions of time or

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fees are due, please consider this submission as a petition for any retroactive extension of time needed. The Commissioner for Patents and Trademarks is hereby authorized to charge the amount due for a one month retroactive extension of time and any deficiency in any fees due with the filing of this paper or credit any overpayment in any fees paid on the filing, or during prosecution of this application to Deposit Account No. 50-0951.

Respectfully submitted,  
AKERMAN SENTERFITT



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